

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).

Reviewer: markspencer

Timestamp: [year=2009; month=8; day=11; hr=14; min=27; sec=42; ms=611;]

=====

Application No: 10597305 Version No: 2.0

Input Set:**Output Set:**

Started: 2009-07-28 19:12:16.496
Finished: 2009-07-28 19:12:18.244
Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 748 ms
Total Warnings: 50
Total Errors: 0
No. of SeqIDs Defined: 50
Actual SeqID Count: 50

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)

Input Set:

Output Set:

Started: 2009-07-28 19:12:16.496
Finished: 2009-07-28 19:12:18.244
Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 748 ms
Total Warnings: 50
Total Errors: 0
No. of SeqIDs Defined: 50
Actual SeqID Count: 50

Error code

Error Description

This error has occurred more than 20 times, will not be displayed

SEQUENCE LISTING

<110> Korea Research Institute of Bioscience and Biotechnology
CHOI, Inpyo

<120> Differentiation regulating agent containing gene which regulating

<130> 58049-00034

<140> 10597305

<141> 2006-07-19

<160> 50

<170> PatentIn version 3.5

<210> 1

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> M13 forward primer

<400> 1

gaccggcagc aaaatg

16

<210> 2

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> M13 reverse primer

<400> 2

caaaagggtc agtgct

16

<210> 3

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> forward primer for gamma-parvin

<400> 3

ctctgaagga cccagcagtc

20

<210> 4

<211> 20

<212> DNA

<213> Artificial Sequence

<220>
 <223> reverse primer for gamma-parvin

 <400> 4
 gcagctgtag ggatagcctg 20

 <210> 5
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> forward primer for Foxplc

 <400> 5
 cgaatctcca gaaaagcagc 20

 <210> 6
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> reverse primer for Foxplc

 <400> 6
 aaatctggac tgtggttggc 20

 <210> 7
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> forward primer for c-myc

 <400> 7
 gccagtgag gatattctgga 20

 <210> 8
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> reverse primer for c-myc

 <400> 8
 gaatcggacg aggtacagga 20

 <210> 9

<211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> forward primer for KC1

 <400> 9
 ggcaacgaga agatcaccat 20

 <210> 10
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> reverse primer for KC1

 <400> 10
 ccacattgac ctggcctact 20

 <210> 11
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> forward primer for PA-PRP

 <400> 11
 cttattgttg gtgctgccct 20

 <210> 12
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> reverse primer for PA-PRP

 <400> 12
 ggttggtcga ggagtgttgt 20

 <210> 13
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> forward primer for IRAK

 <400> 13
 gaagccttgc cagatagcag 20

<210> 14
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> reverse primer for IRAK

 <400> 14
 gcaagacaag aaagcaaggg 20

 <210> 15
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> forward primer for L10A

 <400> 15
 cacacattgg gcttcacaac 20

 <210> 16
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> reverse primer for L10A

 <400> 16
 tgagttcaca ttccagcagc 20

 <210> 17
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> forward primer for pre-pro-proteinase 3

 <400> 17
 acgtgcttct cctccagcta 20

 <210> 18
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> reverse primer for pre-pro-proteinase 3

<400> 18
 aggggaacaga gctgactcca 20

<210> 19
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> forward primer for myeloblastosis oncogene

<400> 19
 gaagaaagtg cctcaccagc 20

<210> 20
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> reverse primer for myeloblastosis oncogene

<400> 20
 gttcaagaac tgcgaggag 20

<210> 21
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> forward primer for CBP35

<400> 21
 ctctctctag tgctacccc 20

<210> 22
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> reverse primer for CBP35

<400> 22
 gtcacgactg atccccagtt 20

<210> 23
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>

<223> forward primer for IL-7 receptor

<400> 23
 tgccagattc atgaggtgaa 20

<210> 24
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>

<223> reverse primer for IL-7 receptor

<400> 24
 ggagagcaag cattccagac 20

<210> 25
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>

<223> forward primer for LPL

<400> 25
 cagctgggcc taactttgag 20

<210> 26
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>

<223> reverse primer for LPL

<400> 26
 ccatactcag tcccagaaaa 20

<210> 27
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>

<223> forward primer for ferritin H chain

<400> 27
 gaccgagatg atgtggctct 20

<210> 28

<211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> reverse primer for ferritin H chain

 <400> 28
 aaaagatgaa ggcagcctga 20

 <210> 29
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> forward primer for MMP 12

 <400> 29
 tttggagctc acggagactt 20

 <210> 30
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> reverse primer for MMP 12

 <400> 30
 gcttggccat atggaagaaa 20

 <210> 31
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> forward primer for RGS

 <400> 31
 gcagcaacct agaagccatc 20

 <210> 32
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> reverse primer for RGS

 <400> 32
 tgtgagacgg caagaatgag 20

<210>	33	
<211>	20	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	forward primer for Serpina3G	
<400>	33	
	ttcaacctca cagagacccc	20
<210>	34	
<211>	20	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	reverse primer for Serpina3G	
<400>	34	
	gtaagcttgc ttccacctgc	20
<210>	35	
<211>	20	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	forward primer for P2Y	
<400>	35	
	gccagaaact ggaagcgtag	20
<210>	36	
<211>	20	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	reverse primer for P2Y	
<400>	36	
	ggtcacgaaa ctctgaagcc	20
<210>	37	
<211>	20	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	forward primer for lymphocyte-specific PTK	

<400> 37	
gaatctgagc cgtaaggacg	20
<210> 38	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> reverse primer for lymphocyte-specific PTK	
<400> 38	
ctgcataaag cgggactagc	20
<210> 39	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> forward primer for semaphorin 6A precursor	
<400> 39	
aagccaccta gagcgatttg	20
<210> 40	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> everse primer for semaphorin 6A precursor	
<400> 40	
gcttccagaa gatcacagg	20
<210> 41	
<211> 34	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> forward primer for CD122	
<400> 41	
gtcgacgctc ctctcagctg tgatggctac cata	34
<210> 42	
<211> 36	
<212> DNA	
<213> Artificial Sequence	

<220>

<223> reverse primer for CD122

<400> 42
ggatcccaga agacgtctac ggcctcaaa ttccaa 36

<210> 43
<211> 21
<212> DNA
<213> Artificial Sequence

<220>

<223> forward primer for perforin

<400> 43
gtcacgtcga agtacttggt g 21

<210> 44
<211> 21
<212> DNA
<213> Artificial Sequence

<220>

<223> reverse primer for perforin

<400> 44
aaccagccac atagcacaca t 21

<210> 45
<211> 20
<212> DNA
<213> Artificial Sequence

<220>

<223> forward primer for bata-actin

<400> 45
gtggggcgcc ccaggcacca 20

<210> 46
<211> 24
<212> DNA
<213> Artificial Sequence

<220>

<223> reverse primer for beta-actin

<400> 46
ctccttaatg tcacgcacga ttcc 24

<210> 47

<211> 1425

<212> DNA

<213> Artificial Sequence

<220>

<223> Mus musculus

<400> 47

atggagagca aagccctgct cctggtggtc ctgggagttt ggctccagag tttgaccgcc	60
ttccgaggag ggggtggccgc agcagacgca ggaagagatt tctcagacat cgaaagcaaa	120
tttgccttaa ggaccctga agacacagct gaggacactt gtcattctcat tcttgatta	180
gcagactctg tgtctaactg ccacttcaac cacagcagca agaccttcgt ggtgatccat	240
ggatggacgg taacgggaat gtatgagagt tgggtgcca aacttgtggc cgccctgtac	300
aagagagaac ctgactccaa tgtcattgta gtagactggg tgtatcgggc ccagcaacat	360
tatccagtgt cagctggcta caccaagctg gtgggaaatg atgtggccag attcatcaac	420
tggatggagg aggagtttaa gtaccccta gacaacgtcc acctcttagg gtacagcctt	480
ggagcccatg ctgctggcgt agcaggaagt ctgaccaata agaaggtcaa tagaattact	540
ggtttgatc cagctgggcc taactttgag tatgcagaag ccccagtcg cttttctcct	600
gatgacgctg atttttaga tgtcttacac acatttacca gggggtcacc tggtcgaagt	660
attgggatcc agaaaccagt ggggcatgtt gacatttata ccaatggagg cactttccag	720
ccaggatgca acattggaga agccatcgt gtgattgcag agagaggact cggagacgtg	780
gaccagctgg tgaagtgtc gcatgagcgc tccattcata tcttcattga ctccctgctg	840
aatgaagaaa accccagcaa agcatacagg tgcaactcca aggaagcctt tgagaaaggg	900
ctctgcctga gttgtagaaa gaatcgctgt aacaatctgg gctatgagat caacaagtc	960
agagccaaga gaagcagcaa gatgtacctg aagactcgct ctcatatgcc ctacaaagtg	1020
ttccattacc aagtcaagat tcacttttct gggactgaga atggcaagca acacaaccag	1080
gccttcgaaa tttctctgta cggcacagtg gccgagagcg agaacattcc cttcacctg	1140
cccaggttt ccacaaataa aacctactcc ttcttgattt acacggaggt ggacatcgga	1200
gaactgctca tgatgaagct taagtggatg agcgactcct acttcagctg gcccgactgg	1260
tggagcagcc ccagcttcgt catcgagagg atccgagtga aagccggaga gactcagaaa	1320
aaggtcatct tctgtgctag ggagaaagtt tctcatctgc agaagggaaa ggactcagca	1380
gtgtttgtga aatgccatga caagtctctg aagaagtctg gctga	1425

<210> 48
<211> 474
<212> PRT
<213> Artificial Sequence

<220>
<223> Mus musculus

<400> 48

Met Glu Ser Lys Ala Leu Leu Leu Val Val Leu Gly Val Trp Leu Gln
1 5 10 15

Ser Leu Thr Ala Phe Arg Gly Gly Val Ala Ala Ala Asp Ala Gly Arg
20 25 30

Asp Phe Ser Asp Ile Glu Ser Lys Phe Ala Leu Arg Thr Pro Glu Asp
35 40 45

Thr Ala Glu Asp Thr Cys His Leu Ile Pro Gly Leu Ala Asp Ser Val
50 55 60

Ser Asn Cys His Phe Asn His Ser Ser Lys Thr Phe Val Val Ile His
65 70 75 80

Gly Trp Thr Val Thr Gly Met Tyr Glu Ser Trp Val Pro Lys Leu Val
85 90 95

Ala Ala Leu Tyr Lys Arg Glu Pro Asp Ser Asn Val Ile Val Val Asp
100 105 110

Trp Leu Tyr Arg Ala Gln Gln His Tyr Pro Val Ser Ala Gly Tyr Thr
115 120 125

Lys Leu Val Gly Asn Asp Val Ala Arg Phe Ile Asn Trp Met Glu Glu
130 135 140

Glu Phe Lys Tyr Pro Leu Asp Asn Val His Leu Leu Gly Tyr Ser Leu
145 150 155 160

Gly Ala His Ala Ala Gly Val Ala Gly Ser Leu Thr Asn Lys Lys Val
165 170 175

Asn Arg Ile Thr Gly Leu Asp Pro Ala Gly Pro Asn Phe Glu Tyr Ala
180 185 190

Glu	Ala	Pro	Ser	Arg	Leu	Ser	Pro	Asp	Asp	Ala	Asp	Phe	Val	Asp	Val	195	200	205
Leu	His	Thr	Phe	Thr	Arg	Gly	Ser	Pro	Gly	Arg	Ser	Ile	Gly	Ile	Gln	210	215	220
Lys	Pro	Val	Gly	His	Val	Asp	Ile	Tyr	Pro	Asn	Gly	Gly	Thr	Phe	Gln	225	230	235
Pro	Gly	Cys	Asn	Ile	Gly	Glu	Ala	Ile	Arg	Val	Ile	Ala	Glu	Arg	Gly	245	250	255
Leu	Gly	Asp	Val	Asp	Gln	Leu	Val	Lys	Cys	Ser	His	Glu	Arg	Ser	Ile	260	265	270
His	Leu	Phe	Ile	Asp	Ser	Leu	Leu	Asn	Glu	Glu	Asn	Pro	Ser	Lys	Ala	275	280	285
Tyr	Arg	Cys	Asn	Ser	Lys	Glu	Ala	Phe	Glu	Lys	Gly	Leu	Cys	Leu	Ser	290	295	300
Cys	Arg	Lys	Asn	Arg	Cys	Asn	Asn	Leu	Gly	Tyr	Glu	Ile	Asn	Lys	Val	305	310	315
Arg	Ala	Lys	Arg	Ser	Ser	Lys	Met	Tyr	Leu	Lys	Thr	Arg	Ser	Gln	Met	325	330	335
Pro	Tyr	Lys	Val	Phe	His	Tyr	Gln	Val	Lys	Ile	His	Phe	Ser	Gly	Thr	340	345	350
Glu	Asn	Gly	Lys	Gln	His	Asn	Gln	Ala	Phe	Glu	Ile	Ser	Leu	Tyr	Gly	355	360	365
Thr	Val	Ala	Glu	Ser	Glu	Asn	Ile	Pro	Phe	Thr	Leu	Pro	Glu	Val	Ser	370	375	380
Thr	Asn	Lys	Thr	Tyr	Ser	Phe	Leu	Ile	Tyr	Thr	Glu	Val	Asp	Ile	Gly	385	390	395
Glu	Leu	Leu	Met	Met	Lys	Leu	Lys	Trp	Met	Ser	Asp	Ser	Tyr	Phe	Ser	405	410	415

Trp Pro Asp Trp Trp Ser Ser Pro Ser Phe Val Ile Glu Arg Ile Arg
420 425 430

Val Lys Ala Gly Glu Thr Gln Lys Lys Val Ile Phe Cys Ala Arg Glu
435 440 445

Lys Val Ser His Leu Gln Lys Gly Lys Asp Ser Ala Val Phe Val Lys
450 455 460

Cys His Asp Lys Ser Leu Lys Lys Ser Gly
465 470

<210> 49

<211> 182

<212> PRT

<213> Artificial Sequence

<220>

<223> Mus musculus

<400> 49

Met Thr Thr Ala Ser Pro Ser Gln Val Arg Gln Asn Tyr His Gln Asp
1 5 10 15

Ala Glu Ala Ala Ile Asn Arg Gln Ile Asn Leu Glu Leu Tyr Ala Ser
20 25 30

Tyr Val Tyr Leu Ser Met Ser Cys Tyr Phe Asp Arg Asp Asp Val Ala
35 40 45

Leu Lys Asn Phe Ala Lys Tyr Phe Leu His Gln Ser His Glu Glu Arg
50 55 60

Glu His Ala Glu Lys Leu Met Lys Leu Gln Asn Gln Arg Gly Gly Arg
65 70 75 80

Ile Phe Leu Gln Asp Ile Lys Lys Pro Asp Arg Asp Asp Trp Glu Ser
85 90 95

Gly Leu Asn Ala Met Glu Cys Ala Leu His Leu Glu Lys Ser Val Asn
100 105 110

Gln Ser Leu Leu Glu Leu His Lys Leu Ala Thr Asp Lys Asn Asp Pro
115 120 125

His Leu Cys Asp Phe Ile Glu Thr Tyr Tyr Leu Ser Glu Gln Val Lys
130 135 140

Ser Ile Lys Glu Leu Gly Asp His Val Thr Asn Leu Arg Lys Met Gly
145 150 155 160

Ala Pro Glu Ala Gly Met Ala Glu Tyr Leu Phe Asp Lys His Thr Leu
165 170 175

Gly His Gly Asp Glu Ser
180

<210> 50

<211> 860

<212> DNA

<213> Artificial Sequence

<220>

<223> Mus musculus

<400> 50

ccgcgggtttc ctgcttcaac agtgettgaa cggaaccggg tgctcgaccc ctccgacccc 60

cgccggcgccg ttcgagcctg agccctttgc aacttcgtcg ttccgcccgt ccagcgctgc 120

caccgcgcct cgccccgccg ccaccatgac caccgcgtct ccctcgcaag tgcgccagaa 180

ctaccaccag gacgcggagg ctgccatcaa ccgccagatc aacctggagt